

## T01D06 - Classwork I: Chemical Equations

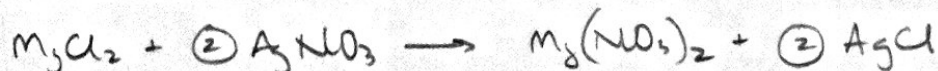
Name KEY

Directions: From the word equation 1<sup>st</sup> write the correct equation in symbol format and 2<sup>nd</sup> balance using the smallest integers possible

1. aluminum sulfate + calcium phosphate  $\longrightarrow$  aluminum phosphate + calcium sulfate

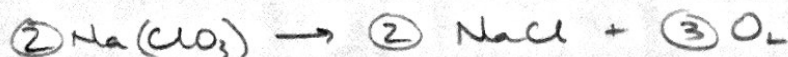


2. magnesium chloride + silver nitrate  $\longrightarrow$  magnesium nitrate + silver chloride



heat

3. sodium chlorate  $\longrightarrow$  sodium chloride + oxygen gas



energy

4. hydrogen gas + oxygen gas  $\longrightarrow$  water



5. zinc + cupric nitrate  $\longrightarrow$  zinc nitrate + copper



6. sodium iodide + chlorine gas  $\longrightarrow$  sodium chloride + iodine



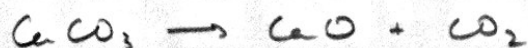
heat

7. copper (II) hydroxide  $\longrightarrow$  copper (II) oxide + water



heat

8. calcium carbonate  $\longrightarrow$  calcium oxide + carbon dioxide



9. aluminum sulfate + barium chloride  $\longrightarrow$  aluminum chloride + barium sulfate



10. sulfuric acid + sodium hydroxide  $\longrightarrow$  sodium sulfate + water

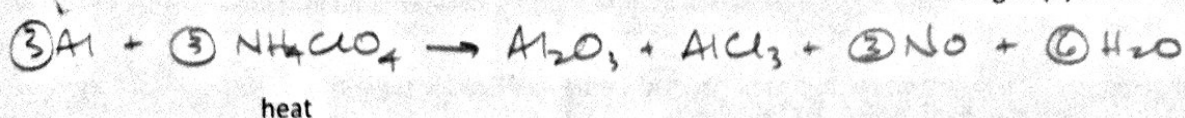


catalyst

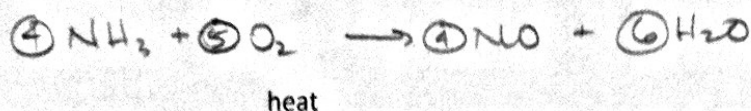
11. hydrogen peroxide  $\longrightarrow$  water + oxygen gas



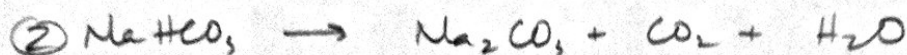
20. aluminum + ammonium perchlorate  $\rightarrow$  aluminum oxide + aluminum chloride + nitrogen (II) oxide + water



13. ammonia + oxygen  $\rightarrow$  nitrogen (II) oxide + water



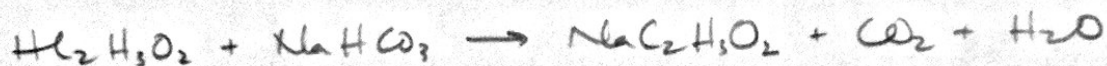
14. sodium bicarbonate  $\rightarrow$  sodium carbonate + carbon dioxide + water



15. potassium hydroxide + sulfuric acid  $\rightarrow$  potassium sulfate + dihydrogen monoxide



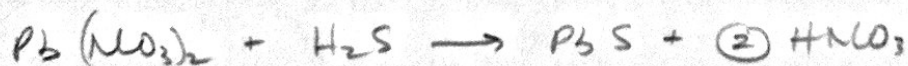
16. acetic acid + sodium bicarbonate  $\rightarrow$  sodium acetate + carbon dioxide + water



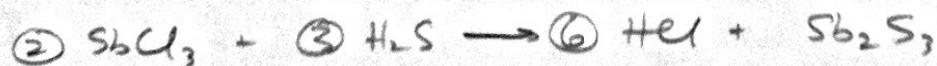
17. iron + hydrochloric acid  $\rightarrow$  iron (II) chloride + hydrogen gas



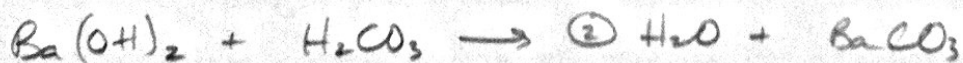
18. lead (II) nitrate + hydrogen sulfide  $\rightarrow$  lead (II) sulfide + nitric acid



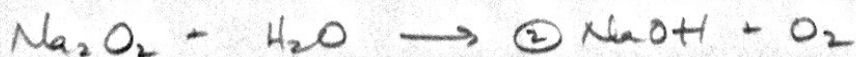
19. antimony trichloride + hydrogen sulfide  $\rightarrow$  hydrochloric acid + diantimony trisulfide



20. barium hydroxide + carbonic acid  $\rightarrow$  water + barium carbonate



21. sodium peroxide + water  $\rightarrow$  sodium hydroxide + oxygen gas



22. calcium carbide (the carbide ion is  $\text{C}_2^{2-}$ ) + water  $\rightarrow$  acetylene ( $\text{C}_2\text{H}_2$ ) + calcium hydroxide

